Headquarters U.S. Air Force

Integrity - Service - Excellence

USAF Concept Development and Experimentation Update

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Director of Operational Plans and Joint Matters

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Overview

- AF Concept Development Goals and Objectives
- USAF Engagement Gameplan
- USAF Concept Development Process
  - USAF CONOPS
- USAF Capabilities-based Planning Process
  - Logic Trail
- Conclusion

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USAF Concept Development Goals and Objectives

- **Help shape tomorrow's Joint Force**
  - **Influence joint employment concepts and the future joint force structure**
  - **Develop and validate AF concepts that support joint concepts – and effectively advocate them**
  - **Invest smartly in DOTMLPF by using AF Capabilities Review and Risk Assessment (CRRA) process**
  - **Provide linkages from AF CRRA process to the Joint Capabilities and Integration Development System (JCIDS) --- and vice versa**
  - **Learn from recent experiences and capitalize on "low hanging fruit"**

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USAF Engagement Gameplan

- **Provide a consistent message to Joint Arena**
  - **One senior AF concept developer – AF/XOX**
- **Provide enough voices so the AF message is heard**
  - **Ensure HQ AF is adequately focused on concept development**
    - **JCIDS involvement**
    - **JROC, JCB, and FCB interaction**
  - **Fill AF billets at JFCOM to include a cross-functional liaison team**
    - **Incorporate MAJCOM representation, ideas, and concepts**
  - **Continue AF Wargaming and support to Sister Service Wargames**
- **Ensure the AF message is based on evidence**
  - **Use historical lessons, testing, experimentation, wargaming, and analysis to validate new concepts**
  - **Use joint framework and common baselines for validation methodologies**

USAF Concept Development Process

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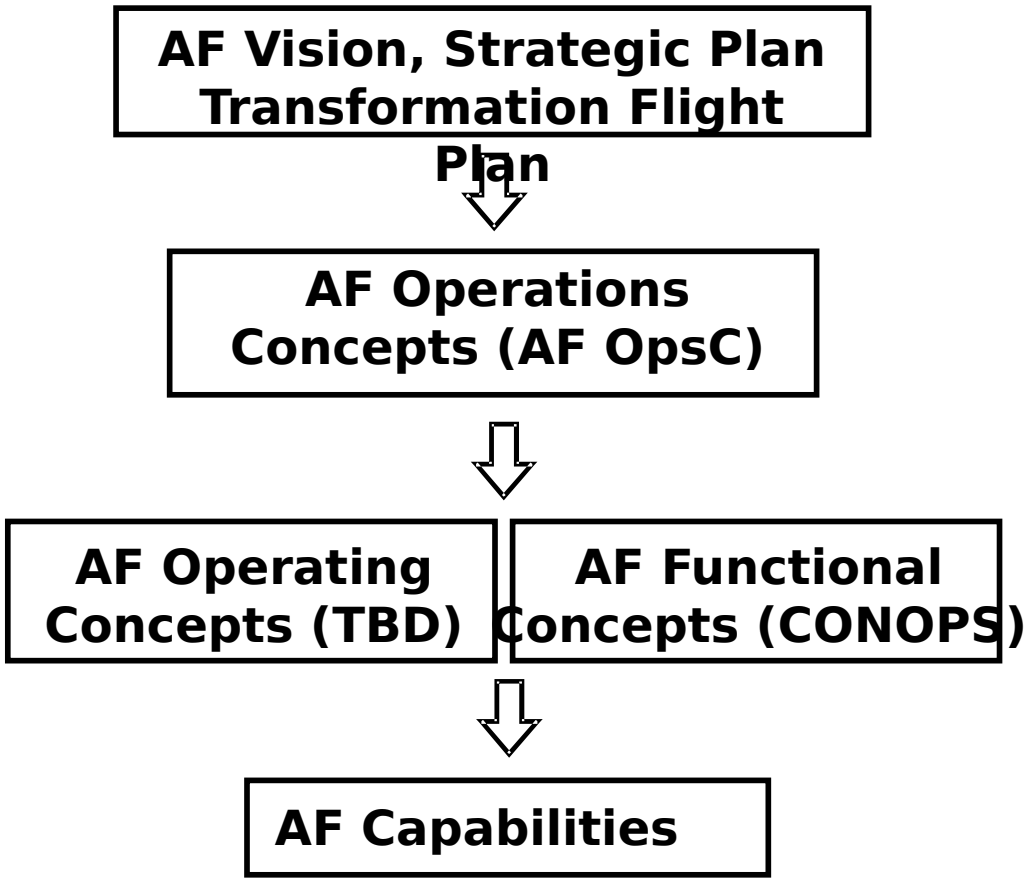
AF Vision, Strategic Plan Transformation Flight Plan
AF Operations Concepts (AF OpsC)
AF Operating Concepts (TBD)
AF Functional Concepts (CONOPS)
AF Capabilities

Primary Developers

HQ AF and MAJCOMs

HQ AF and MAJCOMs

(Under development)

HQ AF and MAJCOMs

Operating Concepts – TBD

Functional Concepts – CONOPS

HQ AF CRRA Process

Service concepts must contribute to Joint Concepts

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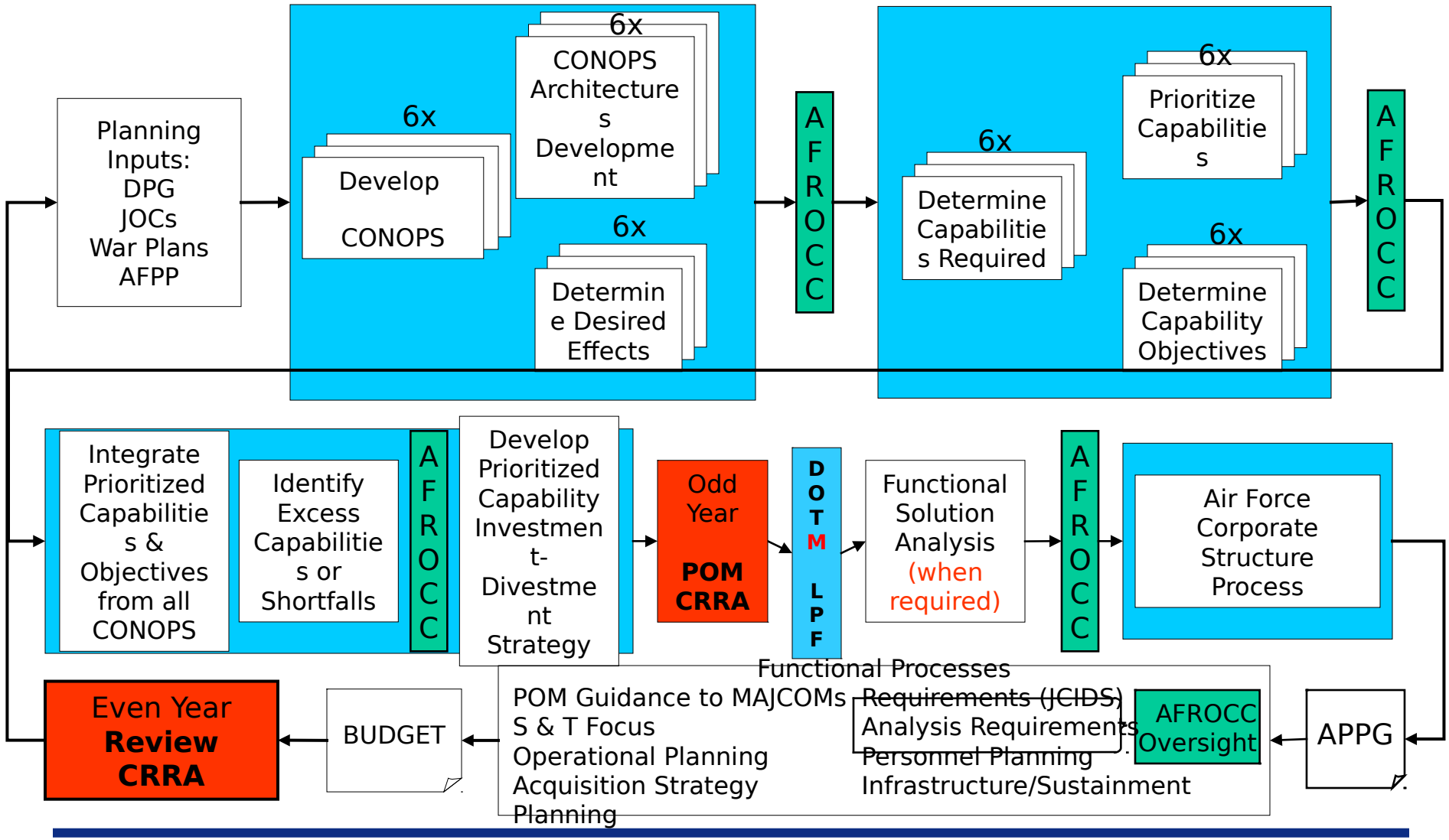
AF CONOPS

AF Capabilities-based Planning Process



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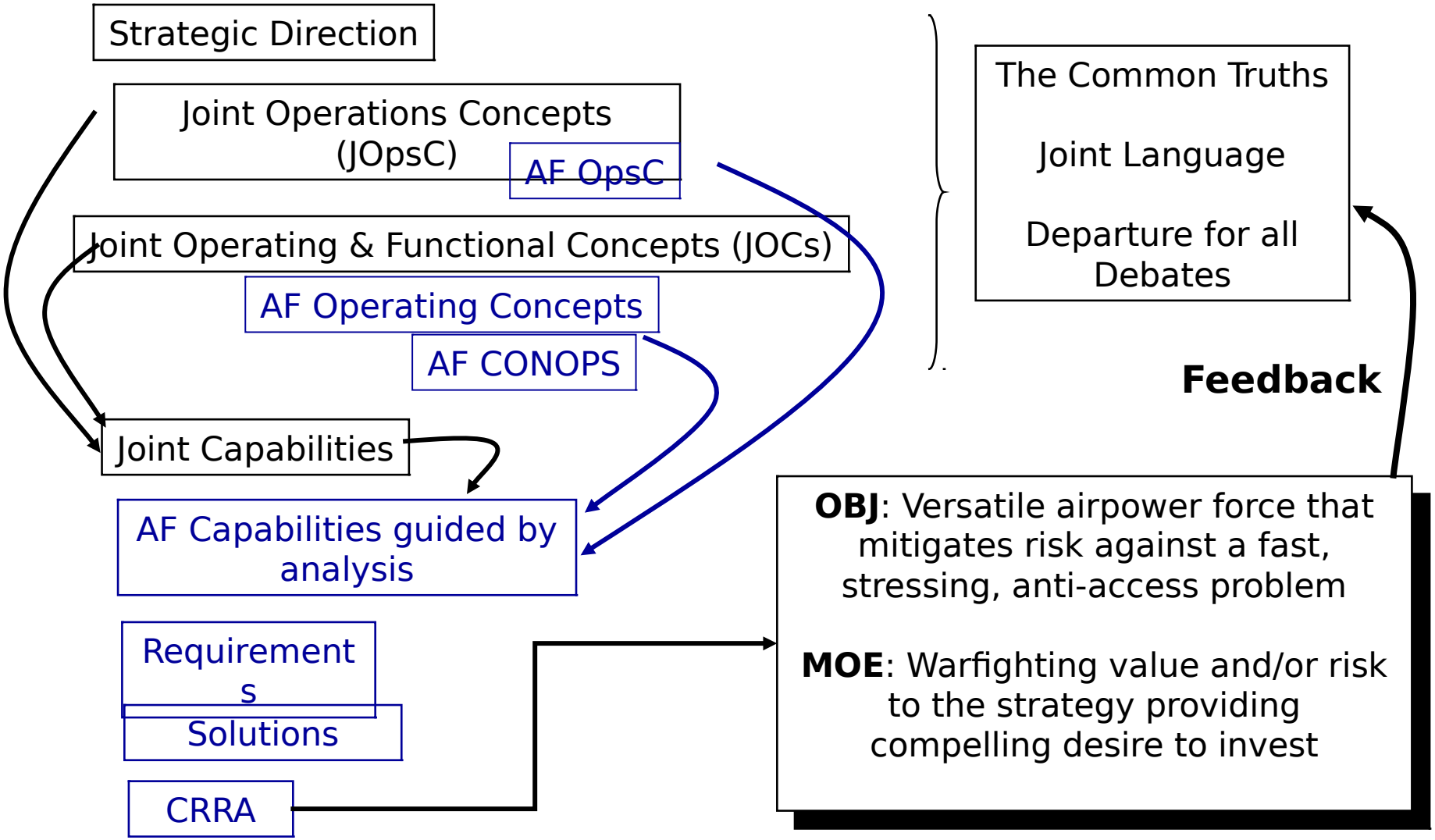
Logic Trail



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Conclusion

- AF is committed to supporting the joint force
- AF is providing answers to support joint concepts
  - Dedicated work force
  - Consistent message
  - Based on evidence and accepted baselines
- “Tooth-to-tail” capabilities-based planning process
- Full gamut of complimentary initiatives

Questions?

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Linked Slides

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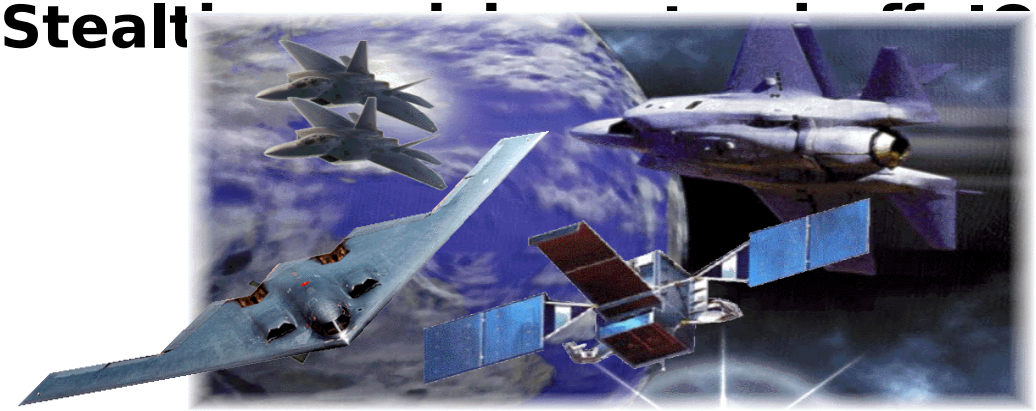
Global Strike CONOPS

- **Mission: Counter intense anti-access systems to allow persistent follow-on operations**
- **Defeat or suppress adversary anti-access capabilities to “kick down the door”**
- **Employ a wide range of stand-off and strike platform-based sensors and flexible command systems to provide accurate and timely data to decision makers / cockpits**
- **Assets: Stealt , and Space / C4ISR**



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Global Persistent Attack CONOPS

- Provide a poised force, ready to engage any fleeting target in any AOR
- Provide an integrated joint air, space, maritime, ground, and IO capability to respond globally against targets
- Provide swift strikes ranging from minutes to hours to days, based on f target
- Assets:
  - Precision, stand-off wpns
  - Space & C4ISR
  - Main and forward bases
  - Secure reachback

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Homeland Security CONOPS

- Integrate with joint and interagency efforts to prevent, protect against, and respond to homeland threats
- Defend against air and space threats
- Prevent threats and attacks by neutralizing the threat
- Protect against threats that can not be prevented
- Respond to a hostile attack against the homeland
- Assets:
  - Offensive and defensive counterair assets
  - Space & C4ISR, GR, &
  - Joint / inter-agencies

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Global Mobility CONOPS

- **Provide assets around the globe anytime, anywhere**
- **Provide tailored capabilities to stand-up and sustain combat operations at prepared and austere locations**
- **Assets:**
  - **Agile / expeditionary combat support**
  - **Trained advance EWOC tea**
  - **Global reachback**
  - **Basing agreements**
  - **Improved delivery modes**
  - **Space & C4ISR**

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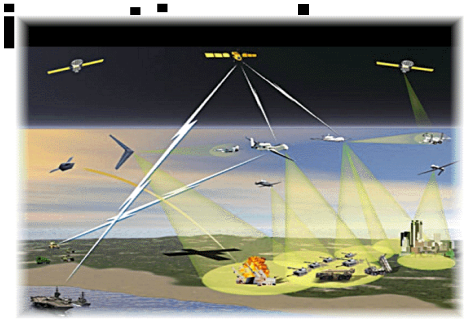
Space & C4ISR CONOPS

- Provide real-time decision quality information across horizontally integrated networks
- Provide a single network to remove the seams between tactical, theater, and national assets
- Enable dynamic command, control, synchronization, and integration of platforms, sensors, and strikers
- Compress the kill chain across the entire spectrum of ops
- Provide persistent global surveillance
- Enable independent or joint and multi[illegible] operations



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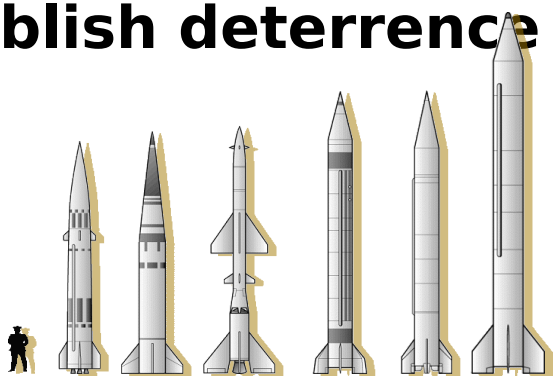
Nuclear Response CONOPS

- **CONOPS: SECRET/NOFORN**
- **Provide nuclear response options to theater commanders across the entire spectrum of conflict**
- **Act as AEF Topcover—the deterrent umbrella under which conventional forces operate**
- **Dissuade any adversary from employing nuclear threats**
- **If deterrence fails, execute response options to defeat the enemy and reestablish deterrence upon conflict termination**



Backup

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Joint Capabilities-based Methodology

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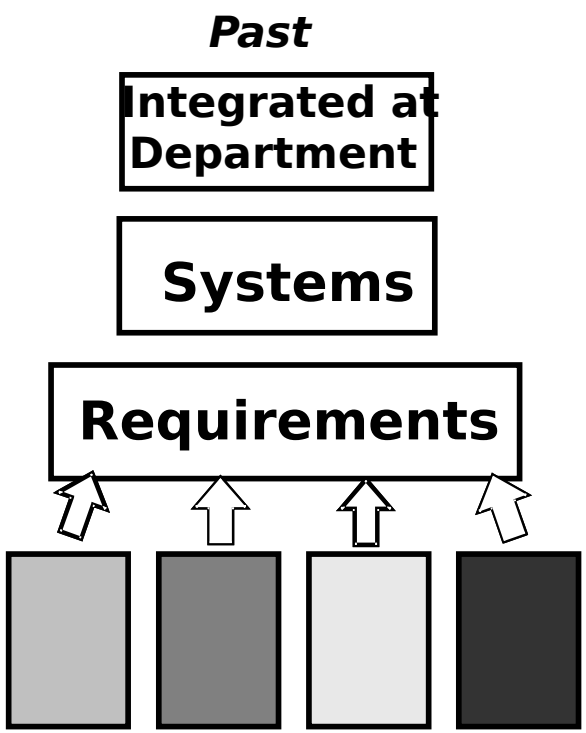

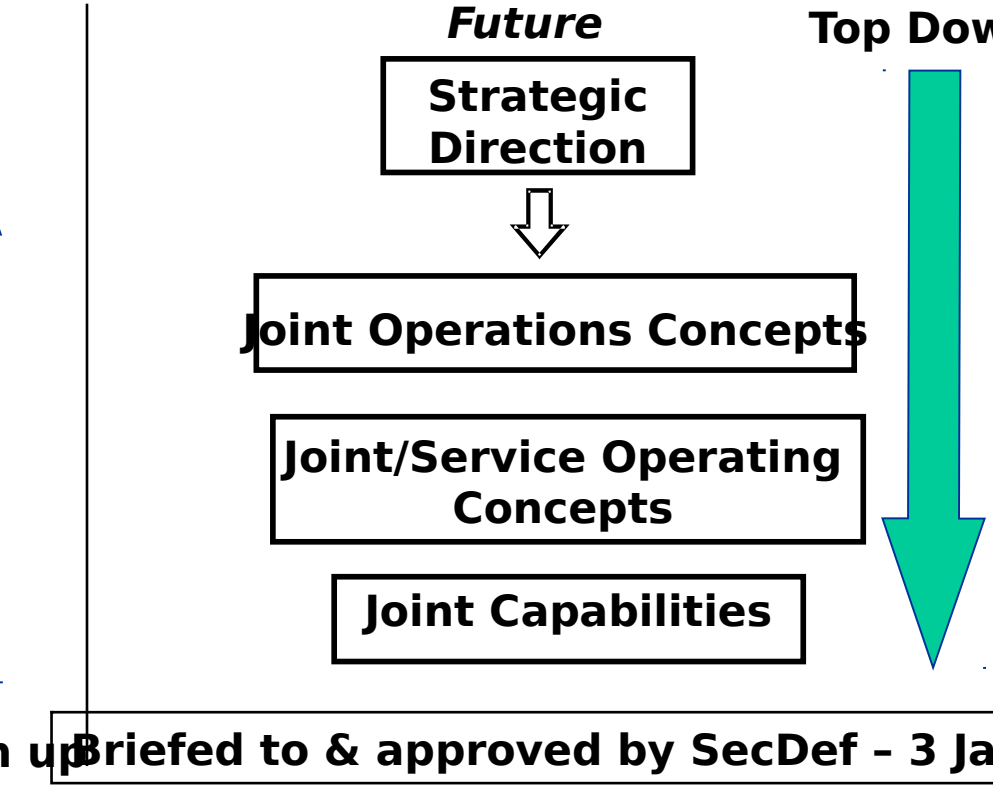

Briefed to & approved by SecDef – 3 Jan

- ✓ Focus leadership early -- Move decision points forward
- ✓ Increase opportunities to adjust at the proper points along the way
- ✓ Improve analytical rigor
- ✓ Shift the focus from "bottom-up threat-based" requirements to "top-down capabilities-based" needs

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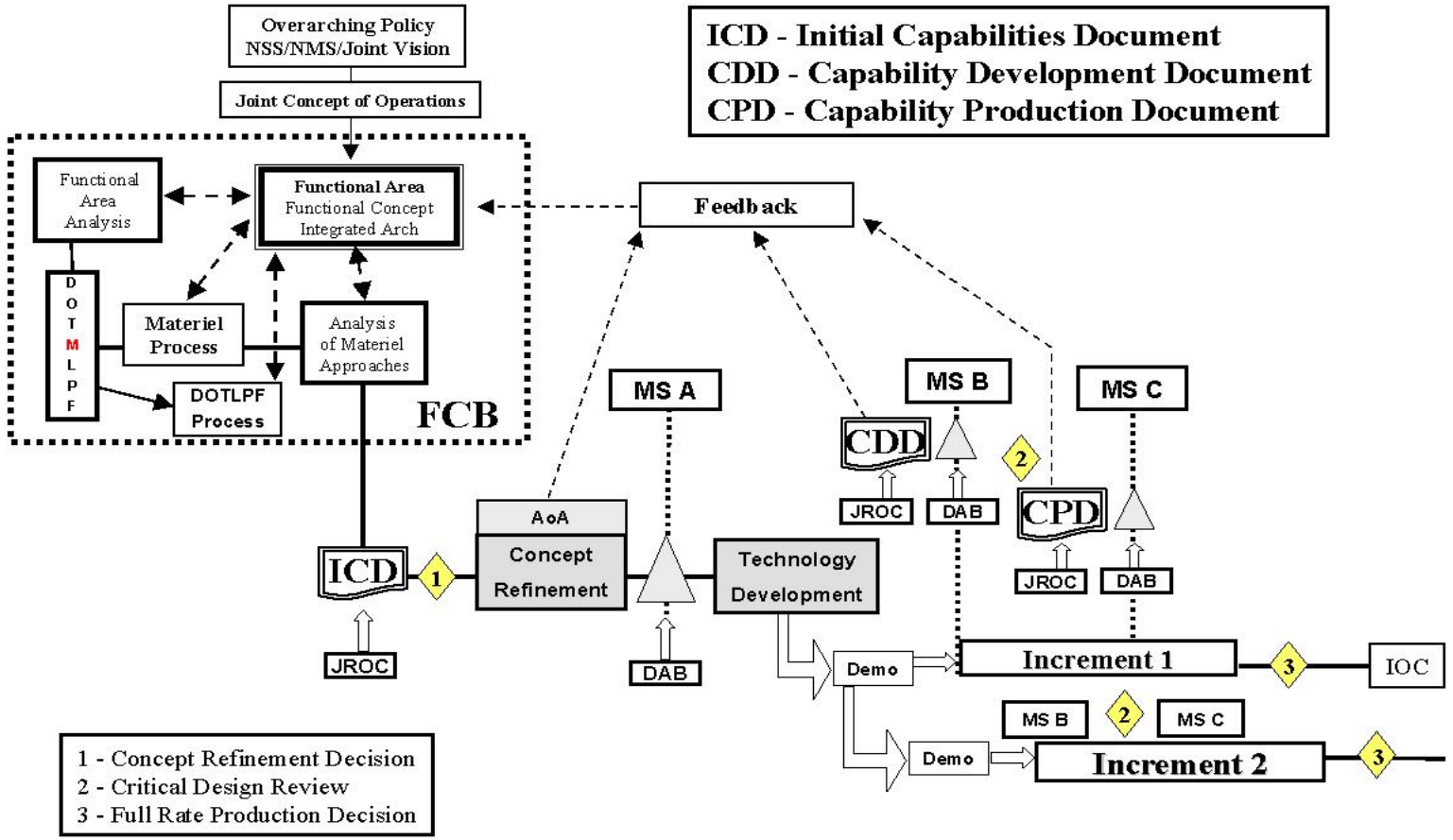
JCIDS Process



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Major Joint Concepts

- Joint Operations Concepts (JOpsC)
- Joint Operating Concepts (JOCs)
  - Major Combat Operations (MCO)
  - Stability Operations
  - Strategic Deterrence
  - Homeland Security
- Functional Concepts
  - Battlespace Awareness
  - Protection
  - Force Application
  - Command and Control
  - Focused Logistics
- Other
  - Joint Urban Ops (JUO)
  - Joint Forcible Entry Ops

JFCOM's CD&E Strategy

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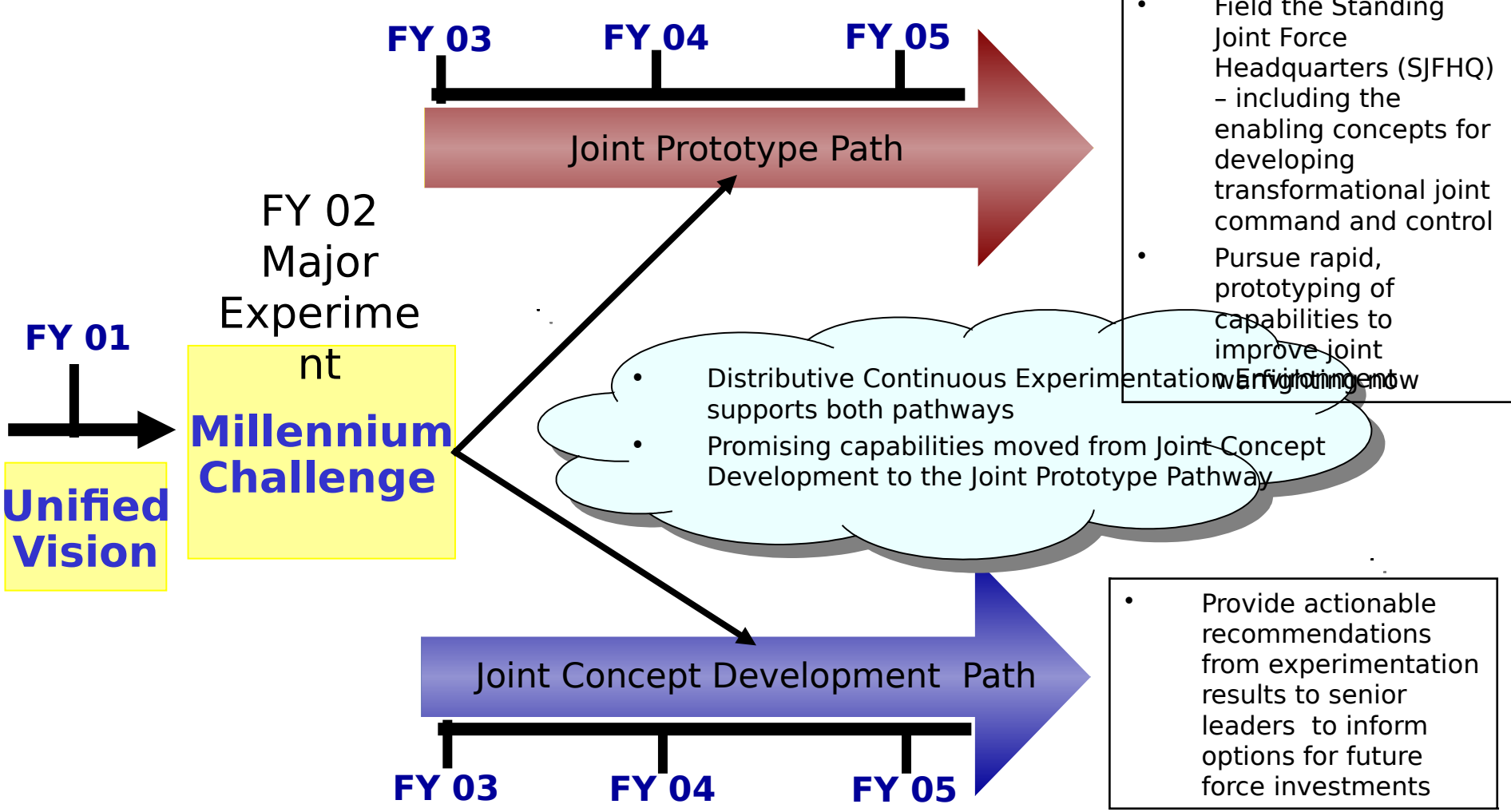

- Field the Standing Joint Force Headquarters (SJFHQ) – including the enabling concepts for developing transformational joint command and control
- Pursue rapid, prototyping of capabilities to improve joint warfighting now

- Provide actionable recommendations from experimentation results to senior leaders to inform options for future force investments

Leverage Service Sponsored Wargames and Seminars

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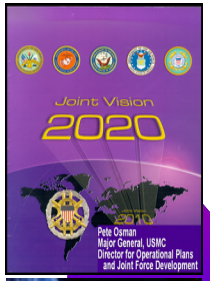
USAF CD&E Process

Planning



Concept & Program Development

- AF & Joint Visions
- AF Strategic Plan
- AF & Joint Campaign Plans
- AF Operating Concepts
- MAJCOM Inputs

Experiment & Wargame Development

Detailed Experiment Plans

Execution

Design

Assess

Prepare

Conduct

Integration

Track and Monitor

Implementation

AF Actions

Joint Actions

Review and Approval

Recommendations

Results

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Other USAF Initiatives

- **JEFX 04**
  - **Three focus areas:**
    - **Effects Based Operations**
    - **Predictive Battlespace Awareness**
    - **Network Centric Infrastructure**
- **Advanced Technology Concept Demo (ACTD)**
  - **Focuses on new technologies from labs and industry**
- **USAF Battlelabs**
  - **Assess innovative concepts to improve Air Force core competencies in Joint Warfighting**
  - **Battlelabs are Major Command or Field Operating Agency owned and managed with Air Staff policy & guidance**
- **USAF Wargames**

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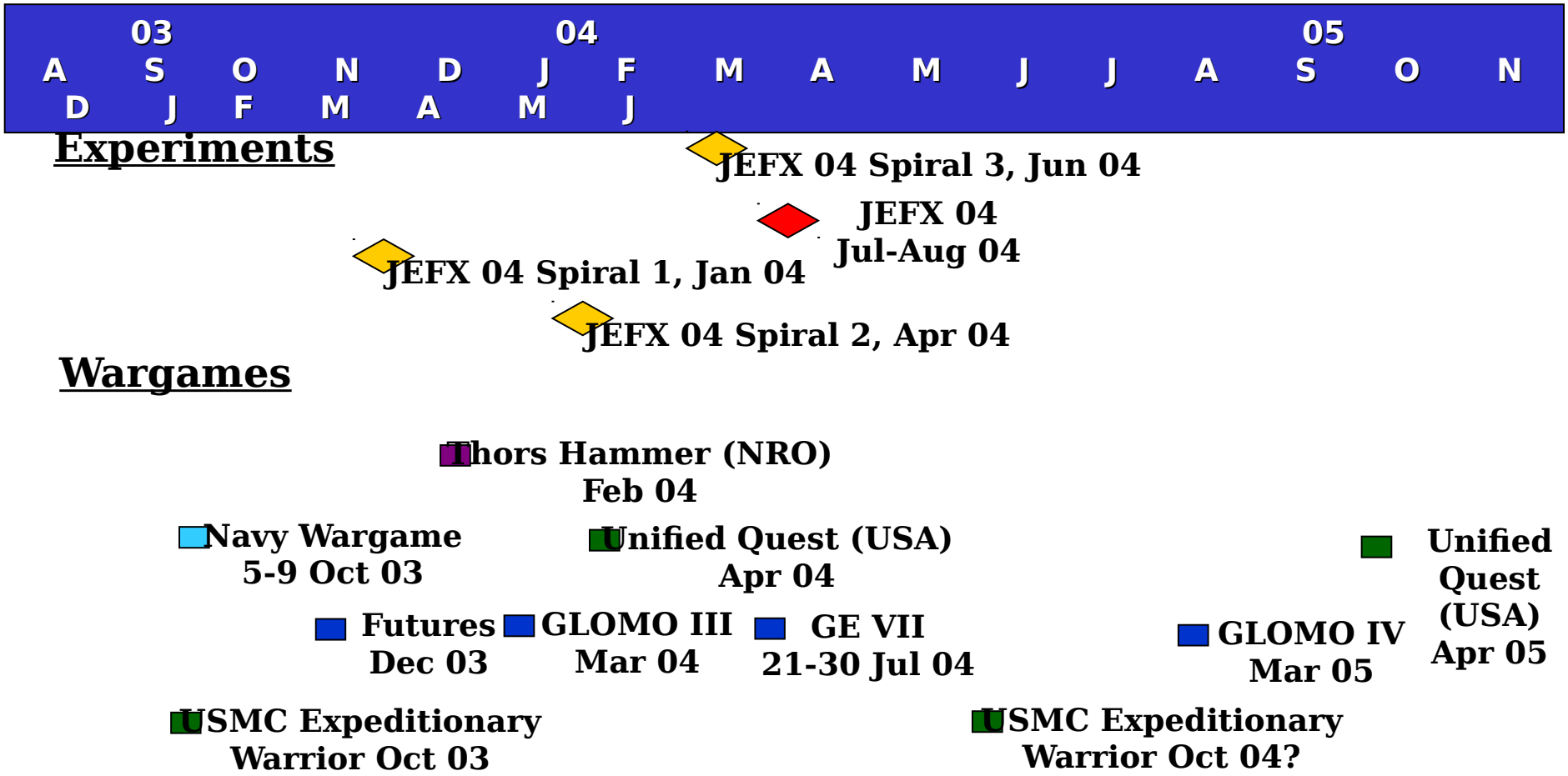
USAF Wargames

- "Global Engagement (GE)"
  - AF CSAF Title X Wargame Series
  - Biennial; Mid-Term Security Environment; Concept Exploration
- "Futures" (Aerospace Future Capabilities Wargame)
  - AF CSAF Title X Wargame Series
  - Biennial; Far-Term Security Environment; Force Structure Exploration
- "Schriever"
  - AF Space Command's Wargame Series
  - Focuses on future Space and Air Power Integration
- Air Force Technology exploration Wargame
  - AF Research Laboratory Wargame series
  - Far Term Technologies for Warfighter

Major USAF Efforts in Experiments & Wargames



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USAF Wargame Support

- AF Support other Service, Joint, and Office Secretary Defense (OSD) Wargaming
  - Army: Unified Quest
  - Navy: Unified Course
  - Marine Corps: Expeditionary Warrior Series
  - JFCOM Concept Development: Pinnacle Impact
  - JFCOM SJFHQ Prototype and Validate Pathway
  - OSD: Project Magellan/Net Assessment
  - Joint Staff: Dominant Maneuver/Precision Engagement

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AEF CONOPS Objectives

- Articulate the span of problems that warfighters face in today's geopolitical environment across the entire spectrum of conflict
- Articulate the unique core competencies, distinctive capabilities, and broad-based functions that the AEF brings to the joint warfighting arena
  - In particular, those critical capabilities that enable the AEF and six Task Forces to accomplish the mission
- Articulate how the AEF sequences those capabilities in a logical manner to provide Task Force CONOPS-based Air & Space Expeditionary Task Forces (AETFs) to the Joint Force